DISCUSSION OF THE AMENDMENT

Claims 1 and 6 have been amended by incorporating the subject matter of Claim 2 therein; Claim 2 has been canceled.

No new matter is believed to have been added by the above amendment. Claims 1, 3, 4 and 6-10 are now pending in the application.

REMARKS

The rejections of Claims 1-3 and 7-10 under 35 U.S.C. § 102(e) as anticipated by, and of Claims 4 and 6 under 35 U.S.C. § 103(a) as unpatentable over, US 2004/0015012 (Hammon et al), are respectfully traversed.

As recited in above-amended Claim 1. an embodiment of the present invention is a method for supplying reaction gases in a catalytic gas-phase oxidation reaction in which at least a material to be oxidized and a gas containing molecular oxygen are mixed and the resultant mixture is supplied to a catalytic gas-phase oxidation reactor, wherein a feed rate of the material to be oxidized and a feed rate of the gas containing molecular oxygen are adjusted so that when a composition of a gas at the inlet of the catalytic gas-phase oxidation reactor is changed from a composition A point [the concentration of the material to be oxidized: R(a), and the concentration of oxygen: O(a)] represented by plotting a concentration of the material to be oxidized and a concentration of oxygen in the gas at said inlet to a composition B point [the concentration of the material to be oxidized: R(b), and the concentration of oxygen: O(b)] [with a proviso that the composition A point and the composition B point are compositions outside a range in which the material to be oxidized and oxygen possibly react to cause explosion (an explosion range), and $R(a) \neq R(b)$ and $O(a) \neq O(b)$], compositions on the way of the change from the composition A point to the composition B point fall outside the explosion range, wherein the material to be oxidized is isobutylene, tertiary butyl alcohol or methacrolein, wherein one of the feed rates of the material to be oxidized and the gas containing molecular oxygen is adjusted in advance by increasing it or decreasing it to the direction away from the explosion range and then the other feed rate is adjusted by increasing it or decreasing it to reach to the composition B point so that the compositions on the way of the change from the composition A point to the composition B point fall outside the explosion range.

Claim 6 is drawn to a related embodiment, which is a computer-readable medium.

Thus, the present invention is characterized by increasing or decreasing a feed rate of a gas, and then increasing or decreasing a feed rate of another gas. These two steps are effective for making a detour as shown in Fig. 1 in order to safely avoid an explosion on increase or decrease of an operating load.

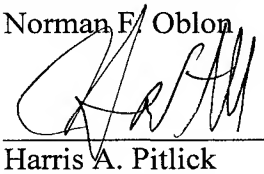
Hammon et al, on the other hand, discloses a process in which a feed of gas streams is automatically stopped by a computer system if the distance from the operating point to the nearest explosion limit is below a predetermined minimum value [0058]-[0062] Thus, Hammon et al merely discloses a simple process in which all gas feeds are stopped at a danger point. Furthermore, Hammon et al's process may be the same as the step (prior art) indicated by the dotted line in Fig. 1 of the specification herein. Clearly, the presently-claimed invention is neither anticipated nor otherwise suggested by Hammon et al.

For all the above reasons, it is respectfully requested that the rejection be withdrawn.

All of the presently-pending claims in this application are now believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon



Harris A. Pitlick
Registration No. 38,779

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)